

**EPID 719**  
**Readings in Epidemiologic Methods**  
**1 credit**

**Syllabus**  
**Fall, 2013**

**Instructor**  
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**Office hours**  
Wednesdays, 1:30-2:30 PM (Sept. 4 – Dec. 4) and by appointment

**Time and location**  
Wednesday 12:00 – 12:50 PM  
2308 McGavran-Greenberg Hall

**Course description**  
A discussion in journal-club format of readings in general epidemiologic methods, from problem conceptualization to application of results. As the course serves a dual role as the Epidemiology Department's GEM (General Epidemiologic Methods) Journal Club, it is open to the public. The sessions are announced weekly on the [epidsems@unc.edu](mailto:epidsems@unc.edu) listserv.

**Co-requisite**  
EPID 718

**Course requirements**  
Attendance and class participation are required for a P. Participation as a discussion leader, moderator or panelist in at least one session is required for an H.

**Format**  
One or two discussion leaders or a moderator and two to four panelists choose the topic and readings for each session, with the instructor's approval. A local expert may be recruited as the special guest, with the instructor's assistance if necessary. The instructor posts the topic, readings and (optionally) discussion questions on the course web site and sends a general email announcement of the session. The discussion leader(s), moderator, panelists and special guest, if any, plan and conduct the session.

**Schedule**

Sept. 4	Oct. 2	Oct. 23
Sept. 11	Oct. 9	Oct. 30
Sept. 18	Oct. 16	Nov. 6
Sept. 25	Oct. 21	Nov. 13

Nov. 20

### **Illustrative reading list (Spring, 2013)**

*January 16*

Johnston KM, Gustafson P, Levy AR, Grootendorst P. Use of instrumental variables in the analysis of generalized linear models in the presence of unmeasured confounding with applications to epidemiological research. *Statist Med* 2008;27:1539-1556.

*January 23*

Hedt RL, van Leth F, Zignol M, Cobelens F, van Gemert W, Nhung NV, Lyepshina S, Egwaga S, Cohen T. Multidrug resistance among new tuberculosis cases: detecting local variation through lot quality-assurance sampling. *Epidemiology* 2012;23:293-300.

*January 30*

Hafeman DM. Confounding of indirect effects: a sensitivity analysis exploring the range of bias due to a cause common to both the mediator and the outcome. *Am J Epidemiol* 2011;174:710-717.

*February 6*

Zubizarreta JR, Cerdá M, Rosenbaum PR. Effect of the 2010 Chilean earthquake on posttraumatic stress: reducing sensitivity to unmeasured bias through study design. *Epidemiology* 2013;24:79-87.

*February 13*

Silverwood RJ, Nitsch D, Pierce M, Kuh D, Mishra GD. Characterizing longitudinal patterns of physical activity in mid-adulthood using latent class analysis: results from a prospective cohort study. *Am J Epidemiol* 2011;172(12):1406-1415.

*February 20*

Vandenbroucke JP, Pearce N. Incidence rates in dynamic populations. *Int J Epidemiol* 2012;41:1472-1479.

*February 27*

Vandenbroucke JP, Pearce N. Case-control studies: basic concepts. *Int J Epidemiol* 2012;41:1480-1489.

*March 6*

Westreich D, Greenland S. The Table 2 fallacy: presenting and interpreting confounder and modifier coefficients. *Am J Epidemiol* 2013; doi 10.1093/aje/kws412.

*March 20*

Abeni DD, Brancato G, Perucci CA. Capture-recapture to estimate the size of the population with human immunodeficiency virus type 1 infection. *Epidemiology* 1994;5:410-414.

*April 3*

Hernán MA, Taubman SL. Does obesity shorten life? The importance of well-defined interventions to answer causal questions. *Int J Obesity* 2008;32:S8-S14.

*April 10*

Hill AB. The environment and disease: association or causation? *Proc Roy Soc Med* 1965;58:295-300.

Nosyk B, Audoin B, Beyrer C, Cahn P, Granich R, Havlir D, Katabira E, Lange J, Lima D, Patterson T, Strathdee S, Williams B, Montaner J. Examining the evidence on the causal effect of highly active antiretroviral therapy on the transmission of HIV using the Bradford Hill criteria. *AIDS* 2013;27 (Epub ahead of print).

*April 17*

Galea S, Riddle M, Kaplan GA. Causal thinking and complex system approaches in epidemiology. *Int J Epidemiol* 2010;39:97-106.

MacRae D. Policy analysis as an applied social science discipline. *Admin Soc* 1975;6:363-388.